



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/515,766	03/01/2000	Heino Hameleers	34648/00439USPX	2696

27045 7590 03/05/2004

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR C11  
PLANO, TX 75024

EXAMINER

ODLAND, DAVID E

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 03/05/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/515,766

Applicant(s)

HAMELEERS ET AL.

Examiner

David Odland

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-15 and 18-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-15 and 18-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The following is a response to the amendments filed on 12/30/2003.

### ***Claim Objections***

2. Claims 1,3,5,15 and 18 are objected to because of the following informalities:

Claims 1 and 15 recite, "...and wherein *the* base station transceiver being directly..."

(emphasis added) in lines 17 and 18. It appears as though the term 'the' should be replaced with 'a' since the claim previously recites a plurality of base stations.

Claims 3,5 and 18 depend on claims that were cancelled in the previous amendment.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1,3,5-15 and 18-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 14 recite, "...the first and the second layer of the cellular telephone network..." in lines 8 and 9. This limitation is confusing because the claim earlier recites that the communications network (as a whole) comprises the first and second layer and so these layers are not specific to the cellular telephone network (see the preamble of the claim).

Art Unit: 2662

Claims 3,5-13, 15 and 18-31 are also rejected because they depend on rejected base claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1,3,5-15 and 18-21, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Barany et al. (USPN 6,434,140), hereafter referred to as Barany.

Referring to claim 1, Barany discloses a communication network having a packet switched protocol based cellular telephone network (a communications system comprising radio packet communications network comprising mobile stations, bases stations and mobile switching centers (see items 401,402,403,407,408 of Figure 4)) comprising a first layer for transferring signaling information assigned to a telephone call being processed by the communication network (the communications system comprises elements that handle signaling information (see items labeled G-MSC 403, line A, line Gs', BSSX 402 and the SGSN of Figure 4)), a second layer for transferring payload information assigned to the telephone call (the communications system also comprises elements that handle payload data (see items labeled BSSx, BSSy, G-MSC 403, Line IMT, and media and PSTN Gateways 413 and 412 of Figure 4)) and interface means for coupling the cellular telephone network to a further network (an interface that

Art Unit: 2662

connects the cellular system to other networks such as IP network 414, SS7 network 418 and PSTN 419 (see the SGSN and GGSN of the GPRS network 406 and the media gateway 413 of the PSTN gateway 412, which in combination act as an interface for the mobile stations to reach the other networks when either voice or data calls are placed by the mobile stations)), the interface means comprising signaling information exchange function between the cellular telephone network and the further network (the interface sends signaling messages from the mobile network to the other networks (see G-MSC 403, line GS' and the SGSN and GGSN of item 406 in Figure 4)) and payload information exchange function between the cellular telephone network and the further network (the interface also sends payload information from the cellular network to the other networks (see the path following G-MSC 403, line IMT, Media Gateway 413, line Gs'IP, network 406 and also the path following 407,408,406 in Figure 4)), the first layer and the second layer of the cellular telephone network being coupled to the interface means (all of the first and second layer elements are connected to the interface (see figure 4)), wherein the second layer of the cellular telephone network transfers the payload information of the telephone call to and from the interface means on a direct route assigned to the telephone call within the second layer (the BSSy directly transfers payload information to the SGSN (see figure 4)), wherein the first layer of the cellular telephone network comprises at least one mobile services switching center being coupled to the interface means (an MSC is coupled to the interface (see item 403 of figure 4)) and wherein the second layer of the cellular telephone network comprises a number of base transceiver stations (the second layer comprises base stations (see BSSx and BSSy of figure 4)) each base transceiver station handling the radio link protocol functions to mobile stations within a cell area assigned to the respective base transceiver

Art Unit: 2662

station (the base stations handle protocols for communicating with the mobile stations (see figure 4)) and wherein the base transceiver station being directly connected to the interface means for payload information exchange within the second layer (BSSy 408 is directly coupled to the SGSN of the interface for payload exchange (see figure 4)).

Note, the 'first layer' as recited in the claim corresponds to the G-MSC 403, line A, Line Gs', BSSx and SGSN of Barany (see Figure 4), since these elements process signaling signals. Also, note that these are not the only elements of Barany that process such signals.

Note, the 'second layer' as recited in the claim corresponds to the BSSx, BSSy, G-MSC 403, Line IMT, and media and PSTN Gateways 413 and 412 of Barany (see Figure 4), since these elements process payload signals. Also, note that these are not the only elements of Barany that process such signals.

Note, that the interface means as recited in the claim correspond to the SGSN and GGSN of the GPRS network 406 and the media gateway 413 of the PSTN gateway 412, which in combination act as an interface for the mobile stations to reach the other networks when either voice or data calls are placed by the mobile stations.

Referring to claim 3, Barany discloses the system discussed above. Furthermore, Barany discloses that the interface means comprises media gateway means for payload information exchange between the cellular telephone network and the further network (the interface comprises a gateway for payload information transferred between the mobile stations and the other networks (see figure 4)) and to be coupled directly to the base transceiver stations (the base stations are connected to the interface (see figure 4)).

Referring to claim 5, Barany discloses the system discussed above. Furthermore, Barany discloses that the interface means comprises media gateway means for payload information exchange between the cellular telephone network part and the further network (the interface comprises a gateway for payload information transferred between the mobile stations and the other networks (see figure 4)) and wherein the mobile services switching center is connected to a media gateway of the interface means to control the media gateway (the MSC is connected to the Media gateways (see figure 4)).

Referring to claim 6, Barany discloses the system discussed above. Furthermore, Barany discloses that the first layer comprises at least one mobile services switching center being coupled to the interface means for signaling information exchange (the MSC is coupled to the interface for signaling exchange (see figure 4)).

Referring to claim 7, Barany discloses the system discussed above, Furthermore, Barany discloses a signaling gateway for signaling information exchange between the cellular telephone network and the further network and wherein the mobile services switching center is connected to the signaling gateway to exchange signaling information between the signaling gateway and the mobile services switching center (the 'call agent' of the PSTN Gateway 412 and the SGSN, which are both part of the interface, are connected to the G-MSC 403 for signaling information exchange (see Figure 4)).

Referring to claim 8, Barany discloses the system discussed above. Furthermore, Barany discloses that the first layer of the cellular telephone network comprises at least one mobile services switching' center and at least one base station controller being coupled to a number of base transceiver stations of the second layer (the MSC is coupled and being connected to at least

Art Unit: 2662

one mobile services switching center wherein the base station controller controls each of the base transceiver stations by means of a device control protocol function and communicates to the mobile services switching center by means of an application signaling protocol function (see figure 4)).

Referring to claim 9, Barany discloses the system discussed above. Furthermore, Barany discloses that the cellular telephone network part is a GSM network (the mobile network (GPRS-136) is part of the GSM network (see figure 4 and column 2 lines 9-17)).

Referring to claim 10, Barany discloses the system discussed above. Furthermore, Barany discloses that the further network is a packet switched network (the further network is the an IP network, which is packet switched (see item 414 of Figure 4)).

Referring to claim 11, Barany discloses the system discussed above. Furthermore, Barany discloses that the packet switched network is the Internet, a VoIP network, an Internet Protocol network, a GPRS network or a UMTS network (the packet switched network is an IP network (see item 414 of Figure 4)).

Referring to claim 12, Barany discloses the system discussed above. Furthermore, Barany discloses that the further network is a circuit switched network (the further network can also be considered the PSTN, which is circuit-switched (see item 419 in Figure 4)).

Referring to claim 13, Barany discloses the system discussed above. Furthermore, Barany discloses that the circuit switched network is an ISDN, PLNM or PSTN network (the circuit-switched network is the PSTN (see item 419 of Figure 4)).

Referring to claim 14, Barany discloses a method for operating a communication network having a packet switched protocol based cellular telephone network (a communications system



Art Unit: 2662

comprising radio packet communications network comprising mobile stations, bases stations and mobile switching centers (see items 401,402,403,407,408 of Figure 4)) comprising a first layer for transferring signaling information assigned to a telephone call being processed by the communication network (the communications system comprises elements that handle signaling information (see items labeled G-MSC 403, line A, line Gs', BSSX 402 and the SGSN of Figure 4)), a second layer for transferring payload information assigned to the telephone call (the communications system also comprises elements that handle payload data (see items labeled BSSx, BSSy, G-MSC 403, Line IMT, and media and PSTN Gateways 413 and 412 of Figure 4)) and interface means for coupling the cellular telephone network to a further network (an interface that connects the cellular system to other networks such as IP network 414, SS7 network 418 and PSTN 419 (see the SGSN and GGSN of the GPRS network 406 and the media gateway 413 of the PSTN gateway 412, which in combination act as an interface for the mobile stations to reach the other networks when either voice or data calls are placed by the mobile stations)), the interface means comprising signaling information exchange function between the cellular telephone network and the further network (the interface sends signaling messages from the mobile network to the other networks (see G-MSC 403, line GS' and the SGN and GGSN of item 406 in Figure 4)) and payload information exchange function between the cellular telephone network and the further network (the interface also sends payload information from the cellular network to the other networks (see the path following G-MSC 403, line IMT, Media Gateway 413, line Gs'IP, network 406 and also the path following 407,408,406 in Figure 4)), the first layer and the second layer of the cellular telephone network being coupled to the interface means (all of the first and second layer elements are connected to the interface (see figure 4));

Art Unit: 2662

the method comprising transferring the payload information of the telephone call to and from the interface means on a direct route through the second layer (the BSSy directly transfers payload information to the SGSN (see figure 4)).

Referring to claim 15, Barany discloses the system discussed above. Furthermore, Barany discloses that after initializing the telephone call, in a base transceiver station of the second layer which is assigned to said call, a base transceiver station (BTS) address is generated and forwarded via the first layer of the cellular telephone network to the interface means (the BSSx transfers signaling information toward the PSTN Gateway and/or the SGSN for processing the call of mobile stations MSx and MSy (note, inherently communications between the mobile and BSS must includes its address since communications between them must take place) (see figure 4)) and interface address information or media gateway address information is generated in the interface means (the interface generates addresses in order for the calls of MSx and MSy to take place to and from the other networks (see figure 4)) and forwarded via the first layer of the cellular telephone network to the base transceiver station for establishing a direct connection through the second layer between the base transceiver station (the interface transfers signaling information, which comprises address information, to the mobile stations through layer first elements such as link A and link Gs' and transfers payload information to the mobile stations through second layer elements such as link IMT and link T1 (see figure 4)) and the interface means to allow direct data, payload and call information exchange between the interface means and the base transceiver station and vice versa (payload and signaling are transferred through the interface to the base stations (se figure 4)), wherein at least one mobile services switching center is provided within the first layer of the cellular telephone network (the system includes a G-MSC

Art Unit: 2662

(see item 403 of figure 4)) and the method providing an MSC device control protocol for signaling information exchange between the MSC and the interface means (the G-MSC communicates with the PSTN Gateway 412 and the SGSN of the interface (see figure 4)), wherein at least one base transceiver station of the second layer is provided (the second layer comprises base stations (see BSSx and BSSy of figure 4)), the base transceiver station handles the radio link protocol functions to mobile stations within an assigned cell area (the base stations handle protocols for communicating with the mobile stations (see figure 4)), the method providing a payload protocol function for direct payload information exchange between the base transceiver and the interface means via the second layer of the cellular telephone network (BSSy 408 is directly coupled to the SGSN part of the interface for payload exchange (see figure 4)).

Referring to claims 18 and 20, Barany discloses the system discussed above, Furthermore, Barany discloses a signaling gateway for signaling information exchange between the cellular telephone network and the further network and wherein the mobile services switching center is connected to the signaling gateway to exchange signaling information between the signaling gateway and the mobile services switching center (the 'call agent' of the PSTN Gateway 412 and the SGSN, which are both part of the interface, are connected to the G-MSC 403 for signaling information exchange (see Figure 4)).

Referring to claim 19, Barany discloses the system discussed above. Furthermore, Barany discloses that the first layer comprises at least one mobile services switching center being coupled to the interface means for signaling information exchange (the MSC is coupled to the interface for signaling exchange (see figure 4)).

Art Unit: 2662

Referring to claim 21, Barany discloses the system discussed above. Furthermore, Barany discloses that the first layer of the cellular telephone network comprises at least one mobile services switching center and a least one base station controller coupled to a number of base transceiver stations of the second layer and being connected to the mobile services switching center, the method providing a device control protocol function to be established between the base station controller and each of the base transceivers for controlling of the base transceiver stations and the information exchange between the base station controller and the base transceiver stations, and the method providing an application signaling protocol function to be established between the base station controller and the mobile services switching center (the Barany reference utilizes the GSM standard and since all of the limitations of claim 21 describe the basic GSM network set-up according to the standard, Barany anticipates claim 21 (see column 2 lines 5-17)).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22-31, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Barany in view of Alperovich et al. (USPN 5,940,763), hereafter referred to as Alperovich.

Art Unit: 2662

Referring to claims 22 and 23, Barany discloses the system discussed above. Barany does not disclose that after a new call is initiated call identification information is generated and stored in the MSC and sent to the base station controller and forwarded on to the base station. However, Alperovich discloses that after initiating a new call by a mobile station, a call identification information being assigned to the new call is generated and stored within the mobile services switching center (the mobile station originates a call wherein TCH channel information is determined by the MSC (see figure 4 and column 6 line 33 through column 7 line 16)), then the call identification information is sent by the application signaling protocol function from the mobile services switching center to the base station controller (the MSC responds with an assignment request signal that is sent to the BSC (see column 6 line 33 through column 7 line 16 and figure 4)) and the call identification information from the mobile services switching center is stored within the base station controller and a corresponding request is forwarded to a base transceiver station by means of the device control protocol function being established between the base station controller and the base transceiver station (the BSC notes the TCH channel described in the assignment request signal and forwards an assignment command signal to the base station, letting the base station know what the assigned TCH channel is (see column 6 line 33 through column 7 line 16 and figure 4)). It would have been obvious to one skilled in the art at the time of the invention to perform such operations disclosed in Alperovich, in the system of Barany, because doing so would provide the mobile unit with a signaling channel which can be used for proper communication with the rest of the network, thereby making Barany more reliable.

Referring to claim 24, Barany discloses the system discussed above. Furthermore, Barany discloses that the base station exchanges payload information between itself and the media gateway (the base stations communicate payload information to the interface with comprises media gateways and is considered second layer because it communicates payload information (see figure 4)). Barany does not disclose that after receiving the call identification information from the base station controller, base transceiver station (BTS) address information is generated in the base transceiver station, the base transceiver station (BTS) address information identifies the base transceiver station being assigned to the call and the call within the base transceiver station. However, it would have been obvious to one skilled in the art at the time of the invention to generate and forward the media gateway address back to the mobile station because doing so will allow the mobile station to properly and quickly address the data it needs to send to the gateway, thereby making the system operate faster.

Referring to claim 25, Barany discloses the system discussed above. Furthermore, Barany discloses that the generated base transceiver station (BTS) address information is forwarded to the base station controller (the system uses the GSM standard for communication and the standard dictates that the BSC needs to know the address of the base station since it controls the base station (see figure 4)).

Referring to claim 26 and 27, Barany discloses the system discussed above. Barany does not disclose that the call identification information from the base station controller is stored in the base transceiver station, the base transceiver station address information is sent to the MSC from the BSC, or the call identification and base transceiver address information is stored in the MSC. However, Alperovich discloses that the call identification information from the base

Art Unit: 2662

station controller is stored in the base transceiver station (the assignment command signal from the BSC tells the base station what the TCH channel so the base station uses this to set up the call and thus must store this information for the call to take place (see figure 4 and column 6 line 33 through column 7 line 16)) and after receiving the base transceiver station (BTS) address information from the base transceiver station the base transceiver station (BTS) address information is forwarded to the mobile services switching center from the base station controller (the base station identity code is forwarded to the MSC (see column 7 line 4)). It would have been obvious to one skilled in the art at the time of the invention to perform such operations taught by Alperovich, in the system of Barany, because doing so would provide the mobile unit with a signaling channel which can be used for proper communication with the rest of the network.

Referring to claim 28, Barany discloses the system discussed above. Barany does not specifically disclose that after requesting a connection from the media gateway the call identification and the base transceiver station (BTS) address information are sent to the media gateway utilizing the mobile services switching center (MSC) device control protocol function. However, it would have been obvious to one skilled in the art at the time of the invention to send such information to the gateway in the system of Barany because doing so will allow the gateway to properly and quickly address the data it needs to send to the mobile station.

Referring to claim 29, Barany discloses the system discussed above. Furthermore, Barany discloses that a request for through-connection is sent from the mobile services switching center to the media gateway by means of the mobile services switching center (MSC) device

Art Unit: 2662

control protocol function (inherently, a request is sent to the gateway in order to set-up the connection with the mobile station and this is done using a protocol (see figure 4)).

Referring to claim 30, Barany discloses the system discussed above. Furthermore, Barany discloses that the media gateway address information, which identifies the media gateway, is forwarded back to the mobile services switching center by means of the mobile services switching center (MSC) device control protocol (the MSC knows where the gateways are since it communicates with the gateways, thus the address information must be communicated (see figure 4)).

Referring to claim 31, Barany discloses the system discussed above. Barany does not disclose that after receiving the media gateway address information from the media gateway the media gateway address information is forwarded from the mobile services switching center via the base station controller to the base transceiver station for establishing a through-connection between the media gateway and the base transceiver station on the basis of the BTS information and the media gateway address information in order to permit direct exchange of information between the media gateway and the base transceiver station and vice versa. However, it would have been obvious to one skilled in the art at the time of the invention to perform such operations because doing so would allow the base station of Barany to know where the gateway is and thus allow it to properly and correctly address the data it needs to send to the gateway.

### ***Response to Arguments***

9. Applicant's arguments filed 12/30/2003 have been fully considered but they are not persuasive.



On page 12 paragraph 2 regarding claim 1, the Applicant argues that the payload and signaling information of Barany are "...not connected to a further network but only to the PS domain..." The Examiner respectfully disagrees. Barany clearly shows, in Figure 4, that the signaling information travels over lines Gs', A, Gs'IP and ISUP and the payload information travels over the lines T1, Gs'IP, Gb' and IMT, which are all transferred to the PSTN Gateway and SGSN/GGSN, which are considered part of the 'interface' (see 'Note' below), and from there both the signaling and payload information is sent to a plurality of 'further' networks including IP network 414, PSTN 419 and SS7 network 418 (see Figure 4). Therefore, indeed the signaling and payload information is ultimately sent to 'further networks'. Note, the term 'interface means' is a broad term and in this case the term is being interpreted as denoting a crossing point that allows information to be transmitted from one network to another network (i.e. one network interfaces another network). In this case, Barany comprises a mobile network that is made up of the mobile stations (401,407), the base stations (402,408), the MSC (403) and the GPRS-136 Network (406) and this mobile network uses the SGSN, GGSN and PSTN Gateway (412) nodes to access the further IP, PSTN and SS7 networks. Therefore, the SGSN, GGSN and PSTN Gateway (412) nodes, as a whole, provide a crossing point for information to travel from the mobile network to the further networks and as such they are being interpreted representing the 'interface means'.

Furthermore, the Applicant also contends on page 12 paragraph 2, that "...the path for signaling and payload in Barany are the same and that the payload information is not sent on the direct way from the base station to the interface." The Examiner respectfully disagrees. Barany clearly shows that signaling travels over such lines as those labeled A, ISUP, Gs'IP and Gs' in

Art Unit: 2662

Figure 4, while payload information travels over such lines as those labeled T1, IMT, Gb' and Gs' IP in Figure 4. Furthermore, the claim recites that the payload is sent from the base station to the interface in a 'direct route' and Barany discloses that calls from BSSx go on direct route through the MSC to the PSTN Gateway, which is part of the 'interface means', and Barany also discloses that calls from the BSSy are transferred on a direct route to the SGSN, wherein the PSTN Gateway and SGSN are part of the 'interface means' (see Figure 4).

Finally, the Applicant argues on page 12 paragraph 3, that Barany does not disclose the limitation of claim 1 reciting, "...a first layer for transmitting signaling information assigned to a telephone call..., a second layer for transmitting payload information assigned to the telephone call..." The Examiner respectfully disagrees. Firstly, the Applicant is drawn to the below discussion of the Examiner's interpretation of the terms 'first layer' and 'second layer'. The term 'layer' is known in the art to be a 'logical' division of networks functionality. For example, in the OSI model, the 'network layer' is responsible for such operations as setting up connections, whereas the 'transport layer' is responsible for other operations such as error correction and flow control. Elements of a network that employs the OSI model may be used to perform any one or all of these network operations and as such these network elements are considered 'network layer' and 'transport layer' devices. Thus, the 'first layer' and 'second layer' as recited in the claims are interpreted by the Examiner as meaning that the claimed communications network has elements that operate at different layers or perform different types of functions. In this case, the 'first layer' elements are those that process signaling-type information and the 'second layer' are those that process payload-type information. Barany discloses network elements that process, *inter alia*, signaling-type information (see G-MSC 403,

Art Unit: 2662

line A, Line Gs', BSSx and SGSN of Figure 4) and payload-type information (see BSSx, BSSy, G-MSC 403, Line IMT, and media and PSTN Gateways 413 and 412 of Figure 4). These elements can be considered 'first layer' and 'second layer' elements and therefore Barany does, in fact, anticipate the claimed invention.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland, who can be reached at (703) 305-3231 on Monday – Friday during the hours of 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (703) 305-4744. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314.

Application/Control Number: 09/515,766


Page 19

Art Unit: 2662

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who can be reached at (703) 305-4750.

deo

February 26, 2004

  
**JOHN PEZZLO**  
**PRIMARY EXAMINER**